

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D130-701 REV. G AND INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D130-701 REV.5 OR LATER APPROVED REVISION

REF. TCCA STC: SH94-14
REF. FAA STC: SR00213NY
REF. EASA STC: 10016996
REF. ANAC STC: 2007S03-03
REF. RUSSIA TC: CT107-350
REF. MALAYSIA STC: VSTC/2020/17

1.0 PURPOSE

The purpose of this Dart Service Instruction (DSI) is to authorize a series of deviations to facilitate the installation of a D130-701-043 basket and correct typographical errors found in IIN-D130-701 Rev. G.

2.0 PROCEDURE

2.1. When installing L/H Aft Angle Assembly D4038-041, it interferes with a tie wrap mount.

Solution:

Move the tie wrap mount shown below by 30mm - 40mm. Affix the tie wrap mount using CR3223-4, MS20426AD4, or equivalent fastener. Fill the existing rivet hole with MS20426AD4 or equivalent fastener.

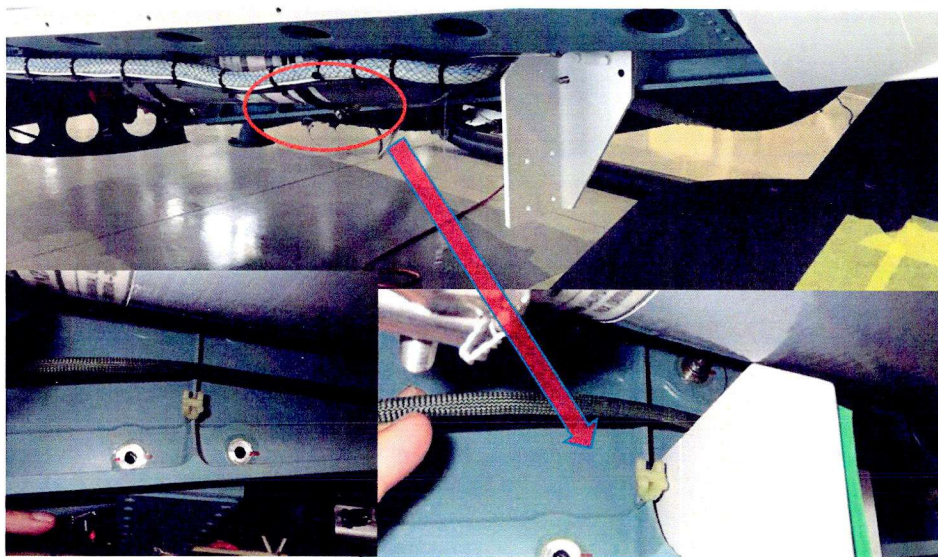


FIGURE 1 - L/H AFT ANGLE ASSEMBLY

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: C. PROVENCAL
C. PROVENCAL (DE # 03)

DATE: 20.10.08
CERT. NO.: SH94-14
ISSUE NO.: 7

APPROVED

B	UPDATES BASED ON FEEDBACK FROM CUSTOMER	SAD	20.10.08
A	NEW ISSUE	SAD	20.10.05
REV.	DESCRIPTION	BY	DATE
DESIGN	SAD	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
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2.2. When installing the R/H Aft Angle Assembly D4038-044, it interferes with the existing wiring.

Solution:

Change the wire routing according to the Aircraft Maintenance Manual or change the position of the tie wrap mount using CR3223-4, MS20426AD4, or equivalent fastener and tie wraps per the Aircraft Maintenance Manual.

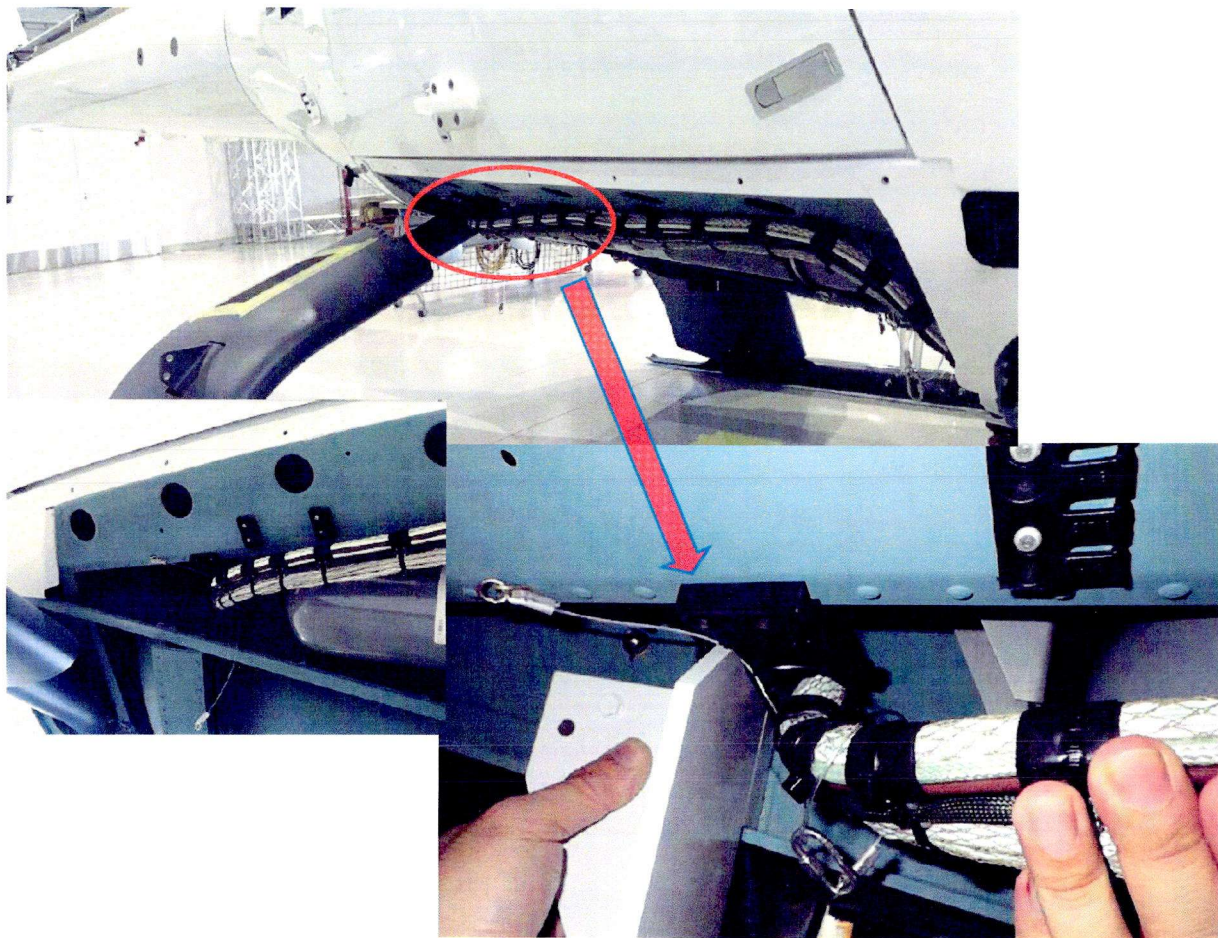


FIGURE 2 - R/H AFT ANGLE ASSEMBLY INSTALLATION

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2.3. When installing the L/H and R/H Aft Angle Assemblies D4038-043/-044, they do not sit flush against the bracket wall, as shown in the pictures below.

Solution:

Trim the bottom of the block shown in yellow below by approximately 2mm. Alternatively, the offending edge may be chamfered to ensure a flush fit.

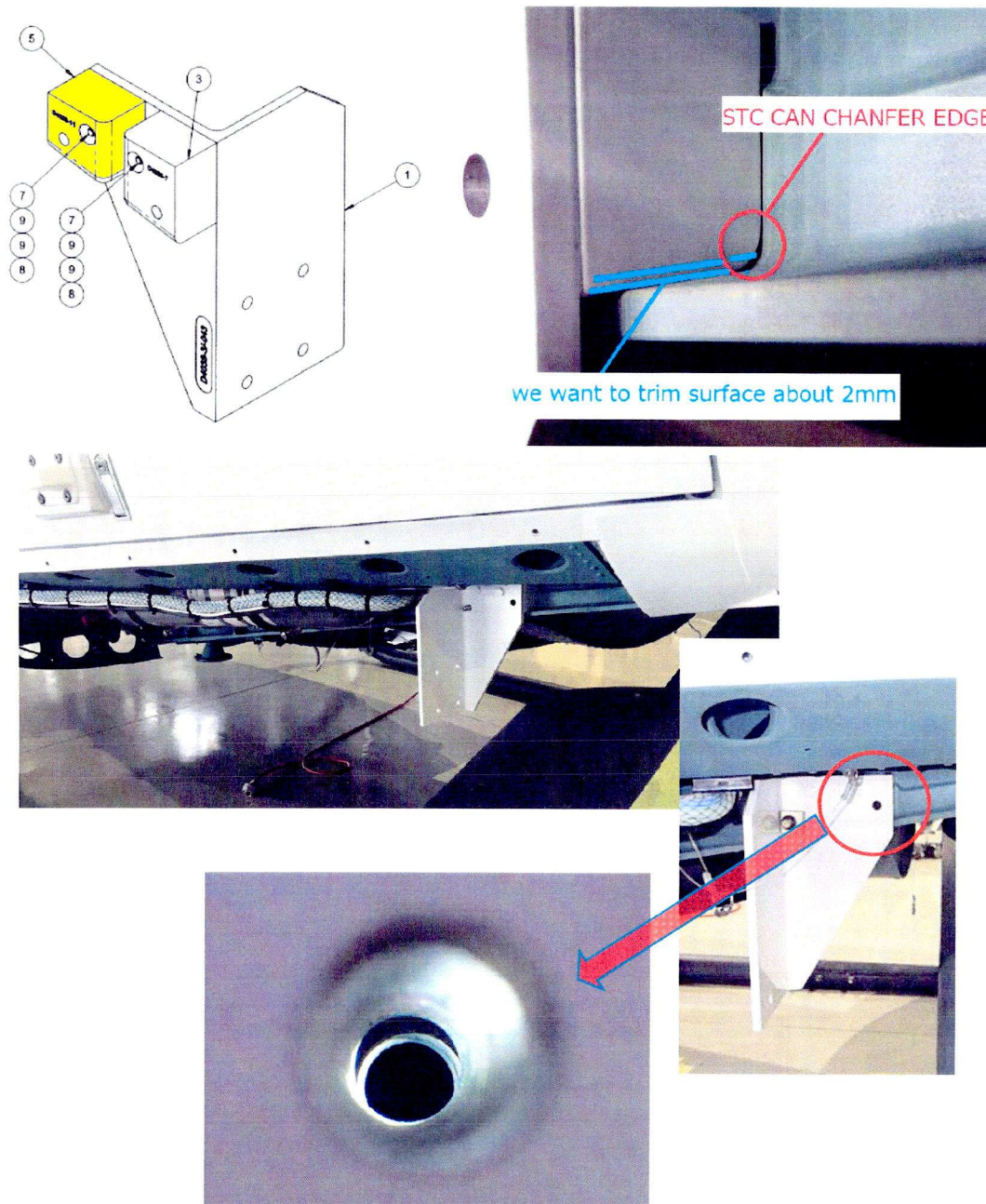


FIGURE 3 - ADJUSTING R/H AFT ANGLE ASSEMBLY

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2.4. When installing the D4037-3 Forward Crossbeam to the aircraft, along with the existing Cargo Hook connector bracket, it interferes with two existing drain hoses.

Solution:

Cut the two tie wraps holding the drain hoses in place. Move the two drain hoses forward to prevent interference with the D4037-3 Fwd Crossbeam. Fix the aft hose to the existing tie wrap support with a tie wrap. Add a spacer P/N E0688-01 in between the two drain hoses. Fix the hoses together using tie wraps as shown in Figure 4 below.

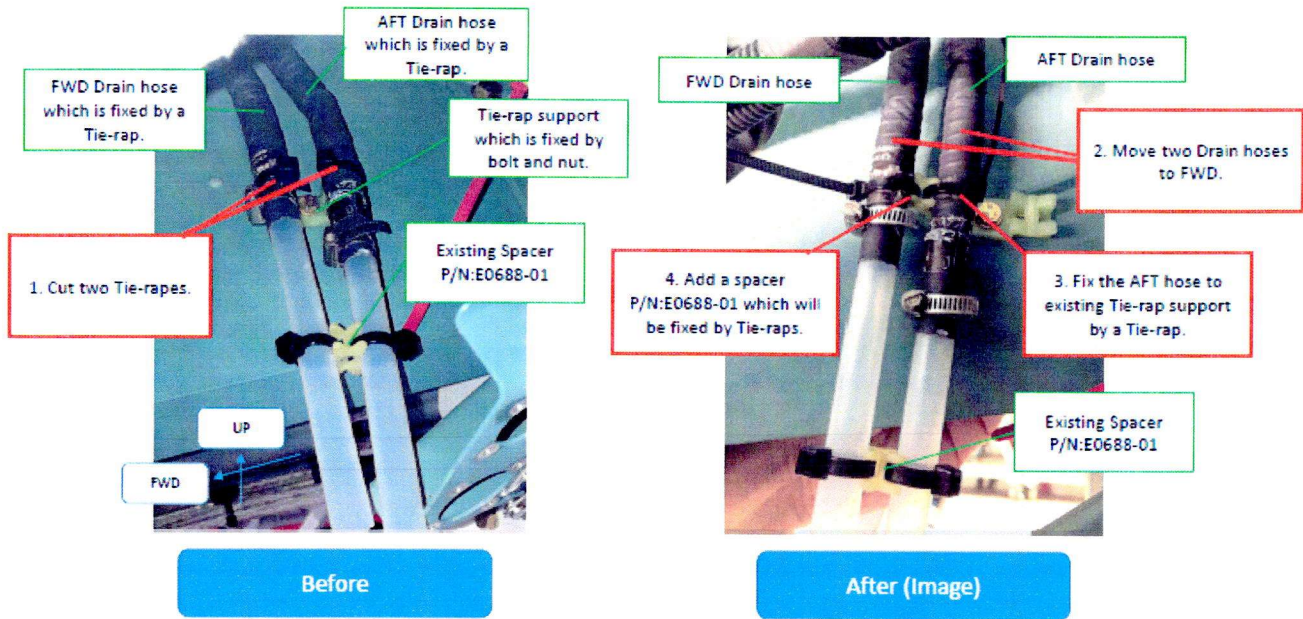


FIGURE 4 - FORWARD CROSSBEAM INSTALLATION

2.5. There is a typo in the Installation Instructions, IIN-D130-701 Rev G, page 16.

Solution:

The value in the note box should read 330mm x 254mm.

NOTE:
LH and RH cut outs are the same dimensions except where noted. Cutouts not to exceed 330 mm x 150 mm (13" x 10")

FIGURE 5 - TYPO IN IIN-D130-701 REV. G

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2.6. When installing the Cargo Hook Connector Bracket, the holes (outlined in red below) were drilled with a pitch of 25mm, instead of 29mm.

Solution:

It is acceptable to install the bracket using holes drilled with a 25 mm pitch instead of a 29 mm pitch.

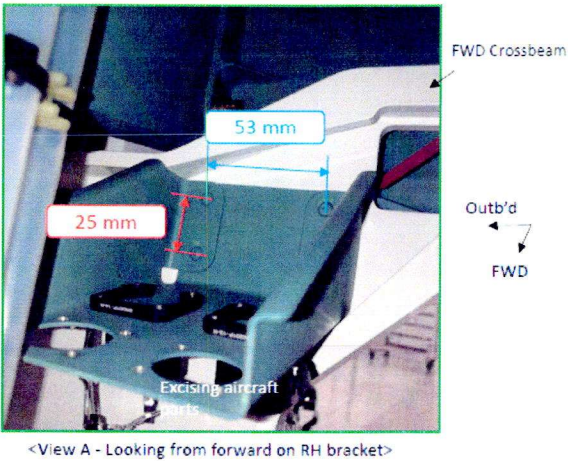
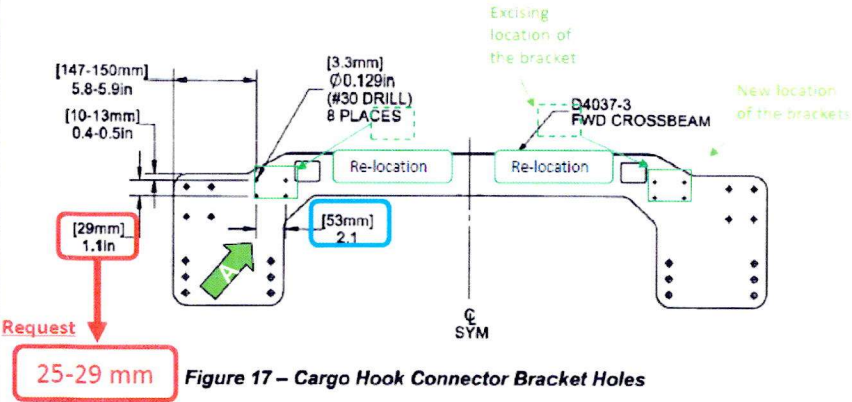


FIGURE 6 - CARGO HOOK CONNECTOR BRACKET

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2.7. Due to interference between the brackets and the cargo beam, the connector brackets are located 15 mm from the upper face of the beam, instead of 10-13 mm.

Solution:

It is acceptable to install the connector bracket 15 mm from the upper face of the beam instead of 10-13 mm from the upper face of the beam. When the basket(s) are removed from aircraft, it is acceptable to leave the D4037-1/-3 crossbeams installed as part of the D130-701-013 fixed provisions kits.

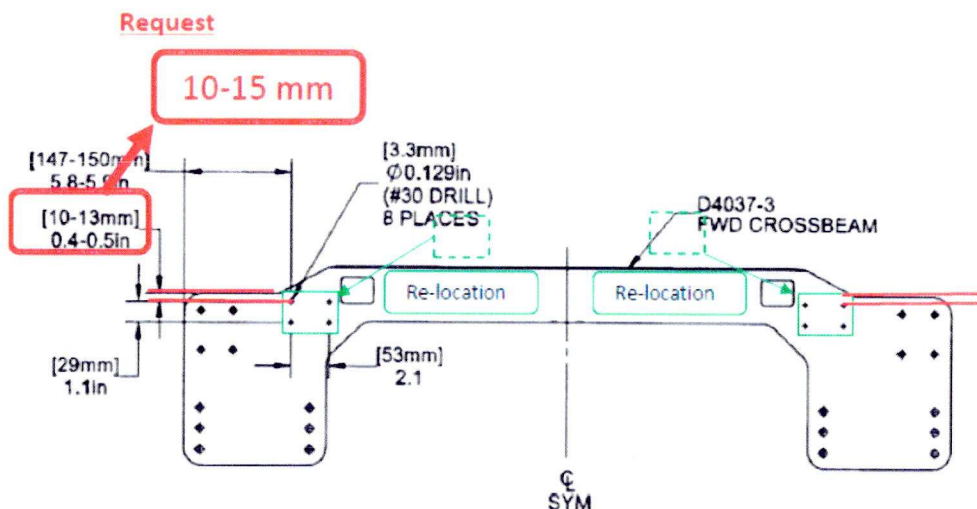


Figure 17 – Cargo Hook Connector Bracket Holes

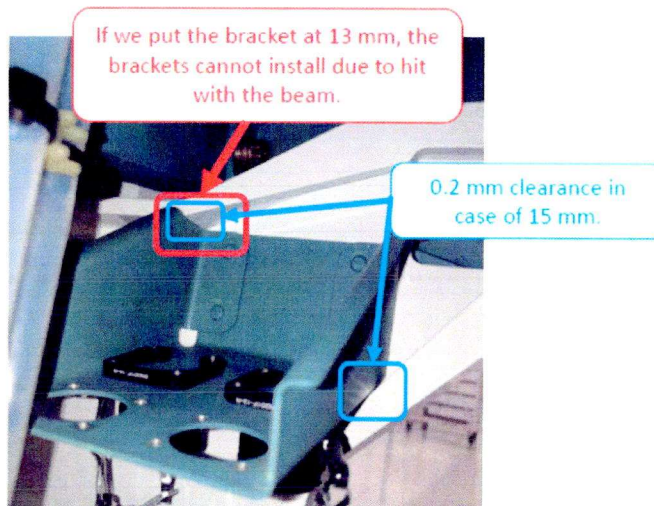


FIGURE 7 - CARGO HOOK CONNECTOR BRACKET LOCATION

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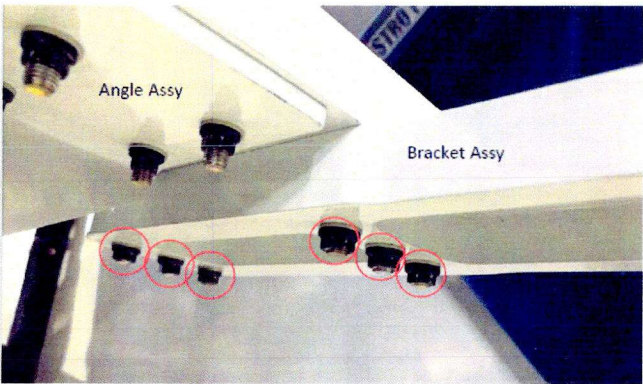
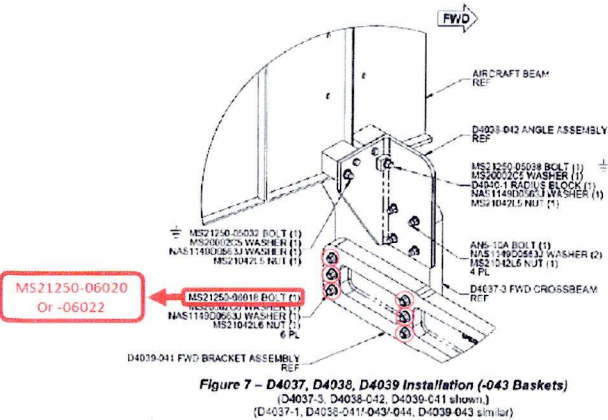
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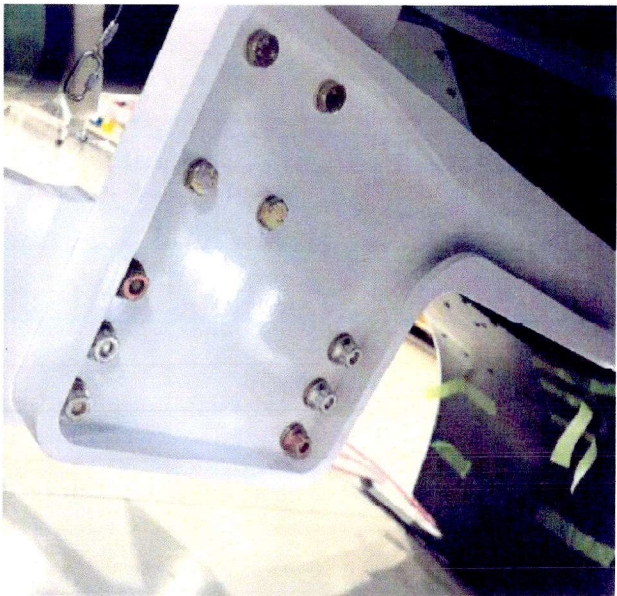
2.8.The attachment bolts, P/N MS21250-06018, used for attaching the D4039-041 Fwd Bracket Assembly to the D4037-3 Fwd Crossbeam and the D4039-043 Aft Bracket Assembly to the D4037-1 Aft Crossbeam per IIN-D130-701 paragraph 3.2.17 are too short. Only one thread shows when fully tightened.

Solution:

It is acceptable to replace the MS21250-06018 bolts with MS21250-06020 bolts (24 qty total) to ensure sufficient threads in safety.



Enlarged photo



Opposite side

FIGURE 8 - BOLT LENGTH ON D4039-041 AND D4039-043 BRACKET ASSEMBLIES

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2.9.The D4039-041 forward and D4039-043 aft bracket assemblies are too wide to completely fit into the upper mounting lugs on the basket assembly. This results in the mounting holes not aligning properly.

Solution:

It is acceptable to trim the upper lugs on the D4039-041 and D4039-043 bracket assemblies by approximately 0.3 mm on each side, to ensure a proper fit into the mounting lugs on the basket. After trimming, touch up the trimmed portion with Alodine 1200/1201 as per MIL-C-5541. Prime the parts as required per the Aircraft Maintenance Manual prior to installation.

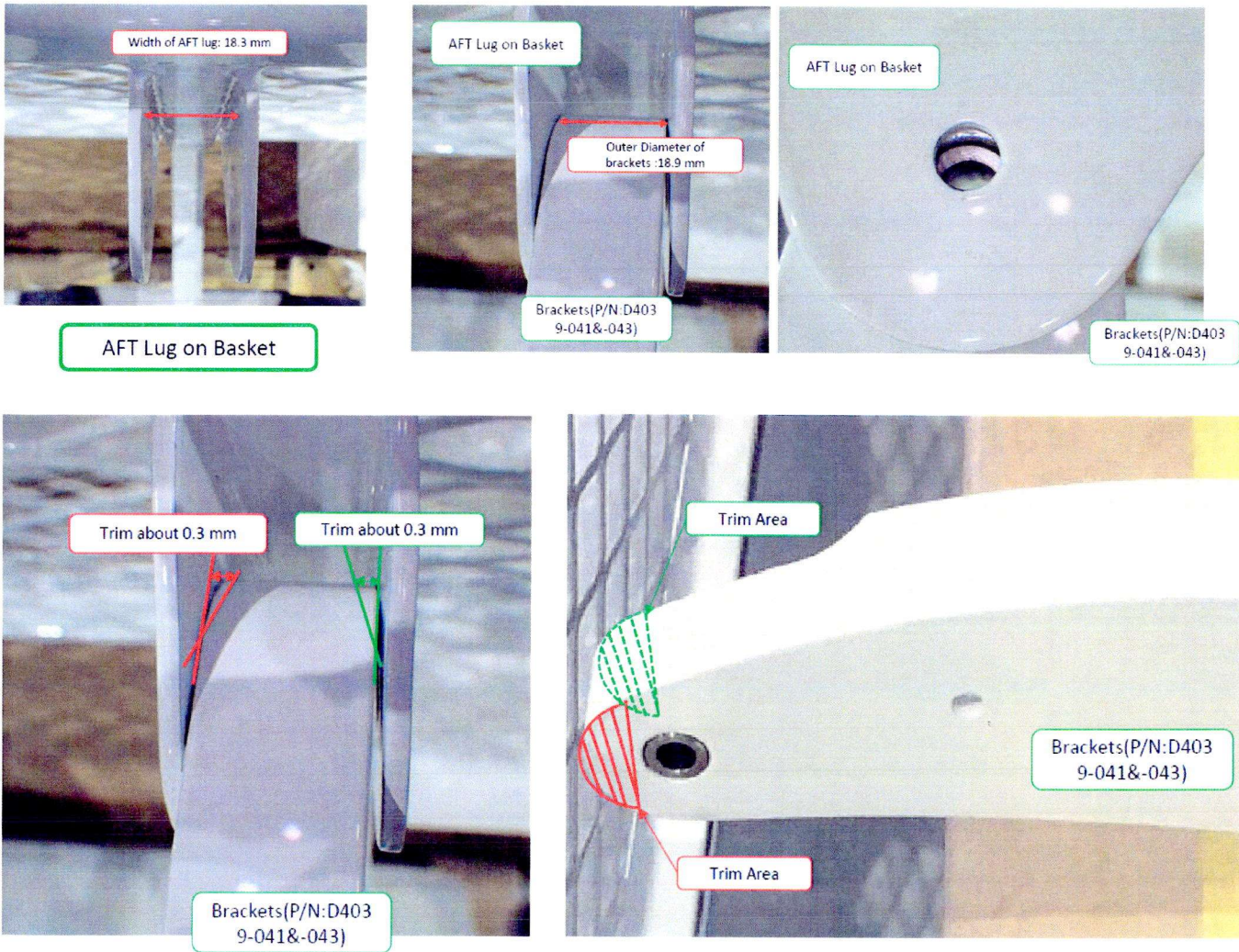


FIGURE 9 - MODIFICATION TO D4039-041/-043 BRACKET ASSEMBLIES

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2.10. There is approximately a 2 mm misalignment of the attachment holes between the D4037-1 aft crossbeam and the D4038-043 and D4038-044 Aft Angle Assemblies.

Solution:

It is acceptable to add "0.040" and "0.032" thick aluminum shims as shown in Figure 10/11. The existing attachment bolts do not need to be changed. In reference to Figure 11 of this service instruction, add shims as follows:

D4038-043: Add a 0.040" shim between the D4038-11 block (item 5) and the D4083-3 angle (item 1). Add a 0.032" shim between the D4038-7 block (item 3) and the D4083-3 angle (item 1).

D4038-044: Add a 0.040" shim between D4038-12 (item 6) and D4038-4 (item 2). Add a 0.032" shim between D4038-8 (item 4) and D4038-4 (item 2).

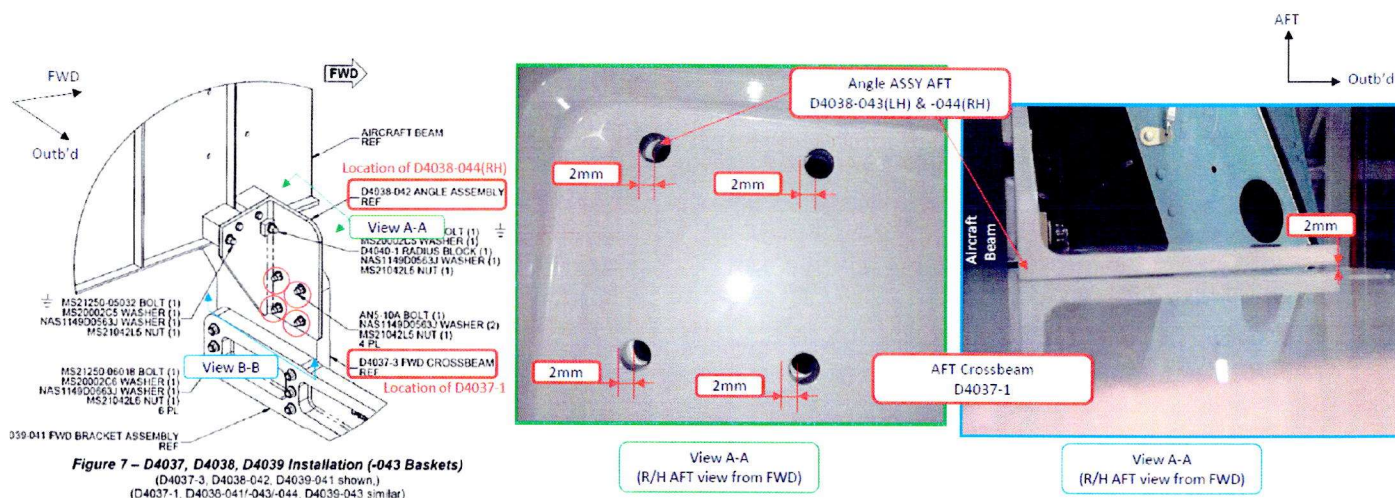
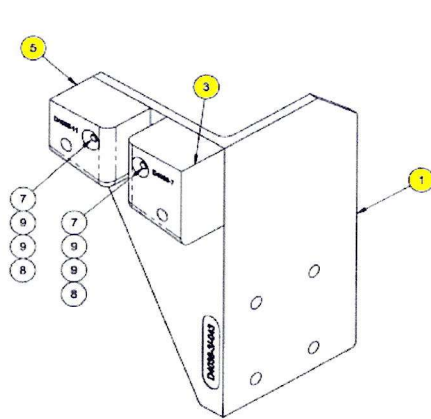


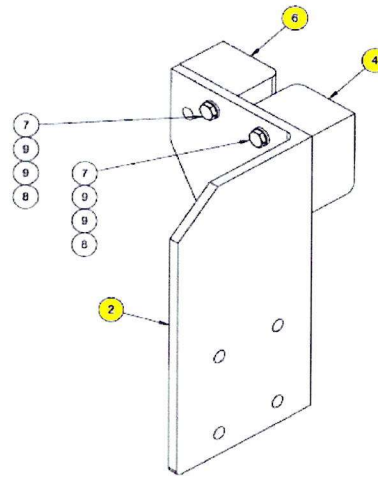
FIGURE 10 - MISALIGNMENT ISSUE

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D4038-043 ANGLE ASSEMBLY, AFT, LH



D4038-044 ANGLE ASSEMBLY, AFT, RH

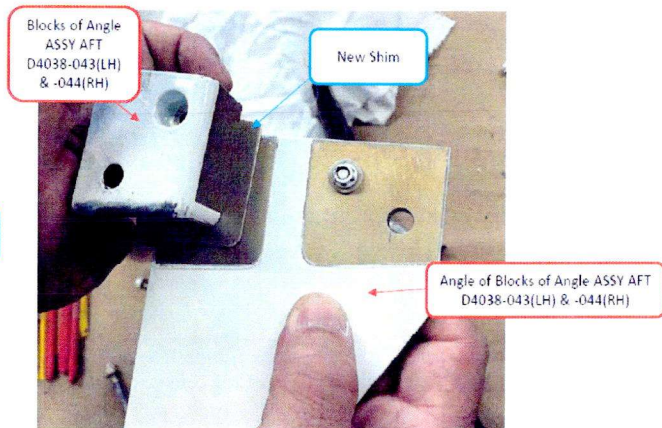
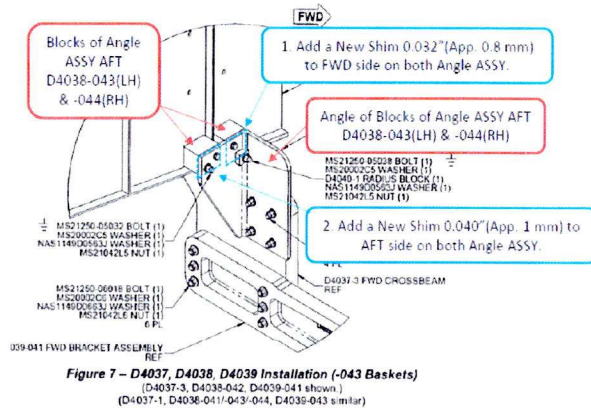


FIGURE 11 - SHIM INSTALLATION

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